

IN THE CLAIMS:

Please **AMEND** claims 1-2, 4-6, and 8-17 as follows.

Please **ADD** claim 18 as follows.

1. (Currently Amended) A method, ~~comprising: for controlling power consumption in a wireless short range communication terminal having at least two different power states, the method comprising the steps of:~~

receiving beacon frames at beacon intervals;

extracting beacon interval information from a beacon frame;

monitoring ~~the~~ data traffic of ~~the~~ a terminal;

defining at least one parameter describing ~~the~~ a data traffic pattern of the terminal;

and

~~based on said at least one parameter and the beacon interval information,~~
dynamically controlling ~~the~~ a power state of the terminal, on the basis of said at least one parameter describing the data traffic pattern of the terminal and the beacon interval information, so that the terminal is maintained in one of at least two power states,

wherein said at least two power states comprise ~~a first power state is an active state and a second power state is a power save state.~~

2. (Currently Amended) A method according to claim 1, wherein the monitoring ~~step includes~~ comprises monitoring packet sizes and packet intervals of the data traffic.

3. (Original) A method according to claim 2, wherein said at least one parameter describes packet sizes and packet intervals.

4. (Currently Amended) A method according to claim 1, wherein the controlling comprises ~~step includes~~ determining a sleep interval defining ~~the~~ time periods when the power save state is possible.

5. (Currently Amended) A method according to claim 4, wherein the determining ~~step includes~~ comprises determining parameters indicating ~~the~~ a timing, a length, and a frequency of the sleep interval.

6. (Currently Amended) A method according to claim 1, further comprising:
~~the step of~~ supplying additional input data ~~including~~ comprising at least one requirement parameter describing requirements set by an application, active in the terminal, for the controlling ~~step~~ the power state of the terminal.

7. (Original) A method according to claim 6, wherein said at least one requirement parameter indicates the maximum period that the terminal may continuously be in the power save state.

8. (Currently Amended) A method according to claim 6, wherein said at least one requirement parameter indicates the ~~Quality of Service (QoS)~~quality of service level required by the application.

9. (Currently Amended) A method according to claim 8, further comprising:
~~the step of~~
mapping the ~~Quality of Service~~quality of service level to input parameters for the controlling the power state of the terminal.~~step.~~

10. (Currently Amended) An apparatus, comprising:~~wireless terminal for a wireless communication short range communication system, the wireless terminal comprising:~~

~~means for receiving~~a receiver configured to receive beacon frames at beacon intervals;

~~means for extracting~~an extractor configured to extract beacon interval information from a beacon frame;

~~a traffic monitoring means for monitoring~~monitor configured to monitor data traffic of ~~the a terminal and for defining~~to define at least one parameter describing ~~the a~~ data traffic pattern of the terminal; and

~~a controller configured to manage power management means for~~ dynamically controlling ~~the a~~ power state of the terminal ~~based on~~ the basis of said at least one parameter describing the data traffic pattern of the terminal and said beacon interval information, ~~thereby~~ to maintain the terminal in one of at least two power states,

wherein said at least two power states comprise ~~a first power state is an active state and a second power state is a power save state.~~

11. (Currently Amended) ~~A wireless terminal~~ An apparatus according to claim 10, wherein the traffic ~~monitoring means include~~monitor comprises a packet analyzer ~~adapted~~ configured to analyze packet sizes and packet intervals.

12. (Currently Amended) ~~A wireless terminal~~ An apparatus according to claim 10, wherein the ~~power management means comprise~~ controller comprises an interface configured to control ~~for~~ applications residing in the terminal, ~~thereby~~ and to receive additional input data from an application, and wherein the additional input data ~~including~~ comprises at least one requirement parameter describing requirements set by the application for the ~~power management means~~ controller.

13. (Currently Amended) ~~A wireless terminal~~An apparatus according to claim 10, wherein the terminal is a ~~WLAN~~wireless local area network terminal.

14. (Currently Amended) ~~A short-range wireless communication system,~~
comprising:

at least one system entity configured to broadcast beacon frames at beacon intervals; and

at least one wireless terminal configured to extract beacon interval information from a beacon frame,

wherein said at least one wireless terminal ~~is provided with~~comprises
~~(1) traffic monitoring means for monitoring~~

a traffic monitor configured to monitor data traffic of said at least one
wireless terminal and ~~for defining to define~~ at least one parameter describing the a
data traffic pattern of the terminal, and ~~(2) power management means~~

a controller configured to ~~for dynamically controlling the control~~ a power
state of said at least one wireless terminal ~~based on~~ the basis of said at least one
parameter describing the data traffic pattern of the terminal and said beacon
interval information, ~~thereby~~ to maintain said at least one wireless terminal in one
of at least two power states,

wherein said at least two power states comprise ~~a first power state is an~~
active state and ~~a second power state is a power save state.~~

15. (Currently Amended) A ~~short range wireless communication~~ system according to claim 14, wherein said at least system entity is a wireless terminal.

16. (Currently Amended) A ~~short range wireless communication~~ system according to claim 14, wherein said at least system entity is an access point connected to a wired network.

17. (Currently Amended) A ~~short range wireless communication~~ system according to claim 14, wherein the traffic ~~monitoring means include~~ monitor comprises a packet analyzer ~~adapted~~ configured to analyze packet sizes and packet intervals.

18. (New) An apparatus, comprising:
receiving means for receiving beacon frames at beacon intervals;
extracting means for extracting beacon interval information from a beacon frame;
traffic monitoring means for monitoring data traffic of a terminal and to define at least one parameter describing a data traffic pattern of the terminal; and

controlling means for managing power for dynamically controlling a power state of the terminal on the basis of said at least one parameter describing the data traffic pattern of the terminal and said beacon interval information to maintain the terminal in one of at least two power states,

wherein said at least two power states comprise an active state and a power save state.